1636

ATTORNEYS AT LAW

5. Comwell Robert W. Esmond Michael B. Ray Robert E. Sokohl Michael O. Lee John M. Covert Linda E. Alcorn Robert C. Millonig Lawrence B. Bugaisky Donald J. Featherstone Michael V. Messinger belith U. Kim Timothy J. Shea, Jr. Patrick E. Garrett Heidi L Kraus Edward W. Yee Albert L. Ferro* Donald R. Banowit Peter A. Jackman Molly A. McCall Teresa U. Medler frev S. Weaver Kendrick P Patterson Vincent L. Capuano Eldora Ellison Floyd Thomas C. Fiala Brian J. Del Buono

Elizabeth J. Haanes Joseph S. Ostroff Frank R. Cottingham Christine M. Lhulier Lawrence J. Carroll* George S. Bardmesser Daniel A. Klein* acy L. Muller* Anne M. Yuricek* John J. Figueroa iera S. Coston

Aric W. Ledford*

Registered Patent Agents • Karen R. Markowicz Nancy J. Leith Helene C. Carlson Gaby L. Longsworth Matthew J. Dowd Aaron L. Schwartz Mary B. Tung Katrina Y. Pei Quach Bryan L Skelton Robert A. Schwartzmar Timothy A. Doyle Jennifer R. Mahalingappa Teresa A. Colella Jeffrey S. Lundgren

Victoria S. Rutherford Eric D. Hayes

Of Counsel
Kenneth C. Bass III

*Admitted only in Maryland *Admitted only in Virginia •Practice Limited to

January 22, 2004

WRITER'S DIRECT NUMBER: (202) 772-8525 INTERNET ADDRESS: BRIAND@SKGF.COM

Art Unit 1636

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Re:

U.S. Utility Patent Application

Application No. 09/438,358; Filed: November 12, 1999

Compositions and Methods for Recombinational Cloning of Nucleic

Acid Molecules

Inventors:

Gerard et al.

Our Ref:

0942.4640001/RWE/BJD/JKM

Sir:

Transmitted herewith for appropriate action are the following documents:

- 1. Fifth Supplemental Information Disclosure Statement;
- 2. List of cited documents on Form PTO-1449 (44 sheets);
- 3. A copy of each of the documents cited on Form PTO-1449 (144 documents: AO5-AM8, and AS67-AS110); and
- 4. One (1) return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Sterne, Kessler, Goldstein & Fox P.L.C.: 1100 New York Avenue, NW: Washington, DC 20005: 202.371.2600 f 202.371.2540: www.skgf.com

Commissioner for Patents January 22, 2004 Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Brian J. Del Buono Attorney for Applicants Registration No. 42,473

RWE/BJD/JKM/acr Enclosures

SKGF 220783v1



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

GERARD et al.

Appl. No. 09/438,358

Filed: November 12, 1999

or: Compositions and Methods for

Recombinational Cloning of Nucleic Acid Molecules

Confirmation No. 9194

Art Unit: 1636

Examiner: Leffers, Jr., G.

Atty. Docket:

0942.4640001/RWE/BJD/JKM

Fifth Supplemental Information Disclosure Statement

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. The numbering on this Fifth Supplemental Information Disclosure Statement is a continuation of the numbering in Applicants' Third Supplemental Information Disclosure Statement filed on August 1, 2002, in connection with the above-captioned application, and Applicants' Fourth Supplemental Information Disclosure Statement filed electronically herewith. A copy of each document is also provided.

The Examiner's attention is directed to the following co-pending U.S. patent applications:

U.S. Application No. 09/648,790, filed August 28, 2000;

U.S. Application No. 10/680,316, filed October 8, 2003;

- U.S. Application No. 10/396,696, filed March 26, 2003;
- U.S. Application No. 09/695,065, filed October 25, 2000;
- U.S. Application No. 09/984,239, filed October 29, 2001;
- U.S. Application No. 10/640,422, filed August 14, 2003; and
- U.S. Application No. 10/454,793, filed June 5, 2003;

which are directed to related technical subject matter. The identification of these U.S. patent applications is not to be construed as a waiver of secrecy as to that application now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited applications and the art cited therein during examination.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material

- 3 -

GERARD *et al.* Appl. No. 09/438,358

submitted herewith.

This Fifth Supplemental Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection, or Notice of Allowance, or an action that otherwise closes prosecution in the application. Payment of the fee under 37 C.F.R. § 1.17(p) has been included with a concurrently filed electronic Information Disclosure Statement, as it is believed that only one fee is required to cover both submissions.

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Brian J. Del Buono Attorney for Applicants Registration No. 42,473

Date: Jan. 27, 2004

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600





FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

| ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM | APPLICATION NO. 09/438,358 |
|--|----------------------------|
| APPLICANT Gerard et al. | |
| FILING DATE November 12, 1999 | GROUP 1636 |

| | · | | | U.S. PAT | ENT DOCUMENTS | | | | | |
|---------------------|---|-----------|--|---------------|--|----------|--------------|----------------------|--|--|
| EXAMINER INITIAL | | DOCI | JMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE | | |
| | AA | 1 | | | | CHASS | SOB-CHASS | FIBING DATE | | |
| | AB | | | | | | | | | |
| | AC | | | | | | | | | |
| | AD | | | | | | | | | |
| | AE | <u> </u> | · | | | | | | | |
| | AF | <u> </u> | | | | | | | | |
| | AG | ļ | | | | | | | | |
| | AH | <u> </u> | | | | | | | | |
| | AI | <u> </u> | ······································ | | | | | | | |
| | AJ | ļ | | ļ | | | | | | |
| | AK | | | <u></u> | | <u> </u> | | | | |
| | | , | | FOREIGN P | ATENT DOCUMENTS | Y | • | | | |
| EXAMINER INITIAL | ļ | DOCU | MENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | | |
| <u>.</u> | AL | | | | | | | Yes No | | |
| •. | AM | | | | | | | Yes No | | |
| | AN | | | | | | | Yes | | |
| | | | | | | | | No Yes | | |
| | A05 | EP 0 | 220 009 A2 | 04/29/1987 | Europe | | | No Yes | | |
| | AP5 | | 427 074 A2 | 05/15/1991 | ' | | | No | | |
| | | 02 | THER (Includin | g Author, Ti | tle, Date, Pertinent Pag | es, etc | .) | | | |
| | AR | | | | | | | | | |
| | AS 67 Akagi, K., et al., "Cre-mediated somatic site-specific recombination in mice," Nucl. Acids Res. 25:1781-1788, Oxford University Press (May 1997). | | | | | | | | | |
| | AT | <u>67</u> | Chromatid Exc | change Produc | Positive Selection of FLI ts in Mammalian Cells," obiology (February 1997) | Mol. Co | ell. Biol. 1 | Sister 7:857-861, | | |
| EXAMINER | | | | | | DATE C | CONSIDERED | | | |

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609.

Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.





next communication to Applicant.

FORM PTO-1449

FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

0942.4640001/RWE/BJD/JKM APPLICANT

ATTY. DOCKET NO.

APPLICATION NO. 09/438,358

Gerard et al.

FILING DATE November 12, 1999

GROUP 1636

| | | | | | November 12, 1999 | | 1636 | |
|----------|----------|--------------|-------------------------------|--|--|---|--------------|-----------------------------|
| | | <u>,</u> | | U.S. PAT | TENT DOCUMENTS | | | |
| EXAMINER | | | | | | | | |
| INITIAL | | DOCU | JMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DAT |
| | AA | | | | | | | |
| | AB | + | | | | | | |
| | AC | + | | | - | | | |
| | AD AE | + | | <u> </u> | - | | | |
| _ | AF | + | | | | | | |
| | AG | - | | | · · · · · · · · · · · · · · · · · · · | | | |
| | AH | + | | | | | | <u> </u> |
| | AI | + | | <u> </u> | | | | <u> </u> |
| | AJ | +- | | <u> </u> | | | | |
| | AK | † · · · · | | | | | | |
| | 1111 | <u> </u> | | FOREIGN P | ATENT DOCUMENTS | 1 | | <u> </u> |
| EXAMINER | | T | | 1000000 | l seemans | <u> </u> | | |
| INITIAL | | DOCU | JMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATIO |
| | | l | | | | | | Ye |
| | AL6 | WO 9 | 91/09957 A1 | 07/11/1991 | WIPO | | | N N |
| | AM6 | WO 9 | 92/15694 A1 | 09/17/1992 | WIPO | | | Ye |
| | | | | | | | | Ye |
| | AN6 | EP C | 542 466 A2 | 05/19/1993 | Europe | | | N |
| | A06 | WO 0 | 94/03624 A1 | 02/17/1004 | WIPO | | | Ye |
| | ACC | - WO 3 | 74/03624 AI | 02/17/1994 | WIFO | | | No. |
| | AP6 | WO 9 | 94/18333 A1 | 08/18/1994 | WIPO | | İ. | Ye |
| | | 07 | THER (Includin | g Author, Ti | tle, Date, Pertinent Pag | ges, etc | :.) | |
| | AR | <u>68</u> | regulated ge | nes by serial | "Identification of div analysis of gene expre | ssion (| SAGE) profi | ling," <i>Proc</i> . |
| | AS | <u>68</u> | a single vec | tor strategy | Inducible expression bas for stable expression i University Press (July | n cultu | egulated red | combination: Nucl. Acids |
| | AT | <u>68</u> | attB Sites f Recombination | rom the <i>Haemo</i> n-Deficient <i>E</i> | Site-Specific Recombina ophilus influenzae Bacte Escherichia coli," J. Ba cobiology (1989). | riophag | e HP1 Propag | gated in |
| EXAMINER | | | <u> </u> | | | DATE (| CONSIDERED | |
| | | | | | | \ | | |



FORM PTO-1449
FIFTH SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM

APPLICATION NO. 09/438,358

APPLICANT Gerard et al.

FILING DATE November 12, 1999 GROUP 1636

| | | | | U.S. PAT | ENT DOCUMENTS | | | | | |
|---------------------|---|---|----------------|-------------------------------|--|---------|--------------|--------------|--|--|
| EXAMINER INITIAL | | DOCU | JMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE | | |
| | AA | | | | | | | | | |
| | AB | | | | | | | | | |
| | AC | | | | | | | | | |
| | AD | | | | | | | | | |
| | AE | | | | | | | | | |
| | AF | | | | | | | | | |
| | AG | | | | | | | | | |
| | AH | | | | | | | | | |
| | AI | | | | | | | | | |
| | АJ | | | | | | | | | |
| | AK | | | | | | | | | |
| | | | | FOREIGN P. | ATENT DOCUMENTS | • | | | | |
| EXAMINER | | | | | | | | | | |
| INITIAL | | DOCU | JMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | | |
| | AL7 | WO 0 | 96/04393 A2 | 02/15/1006 | WIPO | ļ | | Yes | | |
| | ALI/ | WO 3 | 96/04393 AZ | 02/15/1996 | WIPO | | | No | | |
| | AM7 | WO 9 | 96/30498 A1 | 10/03/1996 | WIPO | | | Yes No | | |
| | | | | | | | | Yes | | |
| | AN7 | WO 9 | 6/40722 A1 | 12/19/1996 | WIPO | ļ | | No | | |
| | A07 | 1,000 | 06/40724 31 | 12/10/1006 | MIDO | | | Yes | | |
| | AO7 | WO 3 | 96/40724 A1 | 12/19/1996 | WIPO | | | No | | |
| | AP7 | wo d | 00/12687 A1 | 03/09/2000 | WIPO | | | Yes No | | |
| , | | 07 | THER (Includin | g Author, Ti | tle, Date, Pertinent Pag | es, etc | .) | | | |
| | AR | <u>69</u> | mediated Exc | ision (VEX). ion in Severa | ccise Deletions in Large The <i>trfA</i> Gene of Promis ll Gram-negative Hosts," | cuous P | lasmid RK2 i | is Essential | | |
| | AS | Bai, C., et al., "SKP1 Connects Cell Cycle Regulators to the Ubiquitin AS 69 Proteolysis Machinery through a Novel Motif, the F-Box," Cell 86:263-274, Cell Press (1996). | | | | | | | | |
| | Barnes, G., and Rine, J., "Regulated expression of endonuclease <i>Eco</i> RI in Saccharomyces cerevisiae: Nuclear entry and biological consequences," <i>Proc. Natl. Acad. Sci. USA 82</i> : 1354-1358, National Academy of Sciences (1985). | | | | | | | | | |
| EXAMINER | • | • | | | | DATE (| CONSIDERED | | | |



FORM PTO-1449

FIFTH SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM

APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

FILING DATE November 12, 1999 GROUP 1636

| | | | | | NOVERIBET 12, 1999 | | 1636 | |
|---------------------------------------|----------------|-------------|---|--------------------------------|---|------------------------|------------------------------|---------------------------|
| | <u>-</u> | | | U.S. PAT | TENT DOCUMENTS | | | |
| EXAMINER | | | | | | | | |
| INITIAL | - | DOCT | JMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DAT |
| | AA | - | | | | | | |
| | AB | - | | | | | | |
| | AC | | | | | | | · <u> </u> |
| | AD | | | | | - | | |
| | AE | | | | * | | <u> </u> | |
| | AF | | | _ | | | | |
| | AG | + | | | | | | |
| | AH | - | | | | | | |
| | AI | - | | ļ <u> </u> | | | | |
| | AJ | | | | | | | |
| ,, | AK | <u> </u> | | | L | | | |
| · · · · · · · · · · · · · · · · · · · | | | | FOREIGN P. | ATENT DOCUMENTS | | | |
| EXAMINER INITIAL | | DOCI | MENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATIO |
| | AL8 | WO (| 01/62892 A2 | 08/30/2001 | WIPO | | | Ye N |
| | AM8 | wo d | 02/05294 A1 | 01/17/2002 | WIPO | | | Ye N |
| | AN | | | | | | | Ye N |
| | AO | | | | | | | Ye N |
| | | | | | | | | Ye |
| | AP | | | | | | <u> </u> | N |
| | <u>,</u> | <u> </u> | HER (Includin | g Author, Ti | tle, Date, Pertinent P | ages, etc | .) | |
| | AR | <u>70</u> | Bauer, C.E. (Lambda Site- Inc. (1985). | et al., "Exte specific Reco | ent of Sequence Homologombination," <i>J. Mol. Bi</i> | gy Require | ed for Bacte 187-197, Aca | eriophage ademic Press |
| | AS | <u>70</u> | Bernard, P. o | et al., "The by Gyrase," | F Plasmid CcdB Proteir J. Mol. Biol. 234:534- | n Induces 541, Acad | Efficient <i>P</i> | ATP-dependen (1993). |
| | AT | <u>70</u> | Bernard, P., killer gene, | et al., "Pos ' Gene 148:71 | itive-selection vector -74, Elsevier Science | s using t | the F plasmi | .d ccdB |
| EXAMINER | | 1 | <u> </u> | | | DATE (| CONSIDERED | |



JAN 2 2 2004 W

FORM PTO-1449

next communication to Applicant.

FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

| ATTY. DOCKET NO. | APPLICATION | NO. |
|--------------------------|-------------|-----|
| 0942.4640001/RWE/BJD/JKM | 09/438,358 | |
| APPLICANT | | |
| Gerard et al. | | |
| | | |

GROUP

| | | | | | November 12, 1999 | 1 | 1636 | |
|---------------------|---|-----------|--|-------------------------------|---|--|------------------------------|----------------------|
| | | | | U.S. PAT | TENT DOCUMENTS | | | |
| EXAMINER INITIAL | | DOCU | JMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE |
| | AA | | | | | | | |
| | AB | | | | | | | |
| | AC | | | | | | | |
| | AD | | | | | | | |
| | AE | | | | | | | |
| | AF | | | | | | | |
| | AG | | | | | | | |
| | АН | <u> </u> | | | | | | |
| | AI | | | | | | | |
| | AJ | | | | | | | 1 |
| | AK | | | | | | | |
| | | | | FOREIGN P | ATENT DOCUMENTS | | | |
| EXAMINER | | | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | |
| INITIAL | + | DOCU | JMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
| | AL | | | | | | | Yes No |
| | Ţ <u>,</u> | | | | | | | Yes |
| | AM | ┼── | | <u> </u> | | ļ' | <u> </u> | No |
| | AN | | | | | | | Yes No |
| | AO | | | | | | | Yes |
| | †AU | +- | | | | | | No |
| | AP | | | | | | 1 | Yes No |
| | | 07 | THER (Includin | g Author, Ti | tle, Date, Pertinent Pag | es, etc | -) | |
| | AR | <u>71</u> | Boshart, M., Immediate Ear (1985). | et al., "A V rly Gene of H | Very Strong Enhancer is I Human Cytomegalovirus," (| Located Cell 41 | Upstream of:521-530, Th | f an ne MIT Press |
| | Bouhassira, E.E., et al., "Transcriptional Behavior of LCR Enhancer Elements Integrated at the Same Chromosomal Locus by Recombinase-Mediated Cassette Exchange," Blood 90:3332-3344, The American Society of Hematology (November 1997). | | | | | | | |
| | AT | <u>71</u> | transcription | nal terminato | M., "A bacterial represso or can block upstream act millan Journals Ltd. (198 | tivātior | ∍in or a yea 1 of a yeast | ast gene," |
| EXAMINER | | | | | | DATE (| CONSIDERED | |

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with

FILING DATE



FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM

APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

FILING DATE November 12, 1999 GROUP 1636

| | | | | | November 12, 199 | | 1636 | |
|---------------------|----|------|---|------------------------------|--|---|---------------------------------------|---------------------------------------|
| | | | | U.S. P. | ATENT DOCUMENTS | , | | |
| EXAMINER INITIAL | | DOCI | JMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE |
| | AA | 1 | | D.1.12 | NAME | CHASS | SOB-CHASS | FIBING DATE |
| | АВ | - | | | | | | <u> </u> |
| | AC | | | | | | | |
| | AD | | | 1 | | | | |
| | AE | | | | | | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |
| | AF | | | | | | | |
| | AG | | | | | | | |
| | АН | | | | | | | |
| | AI | | | | | | | |
| | AJ | | | | | | | |
| | AK | | | | | | | |
| | | | | FOREIGN | PATENT DOCUMENTS | | | |
| EXAMINER INITIAL | | DOCT | JMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
| | AL | | ··· | | | | | Ye N |
| | AM | | | | | | | Ye N |
| | AN | | | | | | | Ye N |
| | AO | | | | | | | Ye N |
| | AP | | | | | | | Ye |
| | AP | | | L | itle, Date, Pertine | | | Ne |
| <u>.</u> | AR | 72 | Burioni, R., cloning by co Elsevier (Ma | onstruction | n improved phage di of combinatorial l 997). | splay vector ibraries," <i>Re</i> | for antibody | y repertoire 48:161-164, |
| | AS | 72 | a Specific S: Use in Measu: | ite in the I rement of Ar | Introduction of UAG Escherichia coli Ch mber, Ochre, and Op -3067, American Soc | loramphenicol al Suppressio | Acetyltrans n in Mammal: | sferase Gene ian Cells," |
| | AT | 72 . | Combinatoria: | l Libraries | "Human Monoclonal A : Potential Usefuln ses," <i>Infect. Agent</i> | ess in Preven | tion and/or | Treatment o |
| EXAMINER | 1 | 1 | <u> </u> | | | DATE | CONSIDERED | |



FORM PTO-1449

FIFTH SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

next communication to Applicant.

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM

APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

FILING DATE November 12, 1999 GROUP 1636

U.S. PATENT DOCUMENTS EXAMINER INITIAL DOCUMENT NUMBER DATE NAME CLASS SUB-CLASS FILING DATE AΑ AB AC AD ΑE ΑF AG AΗ ΑI ΑJ ΑK FOREIGN PATENT DOCUMENTS EXAMINER DOCUMENT NUMBER INITIAL DATE COUNTRY CLASS SUB-CLASS TRANSLATION Yes ALNo Yes ΑM No Yes AN No Yes ΑO No Yes ΑP No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Cherepanov, P.P., and Wackernagel, W., "Gene disruption in Escherichia coli: Tc^R and Km^R cassetees with the option of Flp-catalyzed excision of the AR <u>73</u> antibiotic-resistance determinant," Gene 158:9-14, Elsevier Science B.V. (1995).Chong, S., et al., "Single-column purification of free recombinant proteins AS <u>73</u> using a self-cleavable affinity tag derived from a protein splicing element," Gene 192:271-281, Elsevier Science B.V. (June 1997). Choulika, A., et al., "Transfer of Single Gene-Containing Long Terminal Repeats into the Genome of Mammalian Cells by a Retroviral Vector Carrying the cre Gene AT <u>73</u> and the loxP Site." J. Virol. 70:1792-1798, American Society for Microbiology (1996).EXAMINER DATE CONSIDERED EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609.

Draw line through citation if not in conformance and not considered. Include copy of this form with





FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

next communication to Applicant.

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM

APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

FILING DATE November 12, 1999 GROUP 1636

| | | | | II S DA | TENT DOCUMENTS | | | |
|---------------------|----------------|--------------|----------------|----------------------|---|----------|---------------|--------------|
| EXAMINER | | Τ | | U.S. PA | IENI DOCOMENIS | | T | 1 |
| INITIAL | | DOCU | JMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE |
| | AA | | | ļ | | | | |
| | AB | | | | | | | |
| | AC | - | | | | | | |
| | AD | _ | | ļ | | | | |
| | AE | - | | | | _ | | |
| | AF | | - | | | | | |
| | AG | | | - | | | | |
| | AH | - | | ļ | | | | |
| | AI | - | | | | | | |
| | AJ | | | ļ | | | | |
| | AK | | <u> </u> | | | | | |
| | - 1 | _ | | FOREIGN P | ATENT DOCUMENTS | | | |
| EXAMINER INITIAL | | DOCU | MENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
| | AL | | | | | | | Ye N |
| | АМ | | | | | | | Ye N |
| | AN | | | | | | | Ye N |
| | AO | | | | | | | Ye N |
| | AP | | | | | | | Ye N |
| | | 07 | THER (Includin | g Author, Ti | tle, Date, Pertinent Pa | ges, etc |) | <u> </u> |
| | AR | 74 | interference | by double-st | owitz, E.M., "Specific tranded RNA in <i>Arabidop</i> ational Academy of Scie | sis thal | iana," Proc | |
| | AS | 74 | | ccharomyces (| cational Analysis of th cerevisiae," Mol. Cell. (1988). | | | |
| | AT | 74 | CLONTECH, "C | reator™ Gene 00). | Cloning & Expression S | ystem," | CLONTECHni qı | ues 15:7-11, |
| EXAMINER | <u></u> | | I | | | DATE | CONSIDERED | |



JAN 2 2 2004 W

FORM PTO-1449
FIFTH SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

next communication to Applicant.

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM

APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

FILING DATE November 12, 1999 GROUP 1636

| | | | | U.S. PAT | TENT DOCUMENTS | | | | |
|---------------------|--------------|---|--------------------------------|------------------------------|-------------------------------|--------|--------------|-------------|--|
| EXAMINER INITIAL | | DOCI | JMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE | |
| | AA | | | | | | 332 3222 | | |
| | AB | | - | | | | | | |
| | AC | | | | | | | | |
| | AD | | | | | | | | |
| | AE | | | | | | | | |
| | AF | | | | | | | | |
| | AG | <u> </u> | | | | | | | |
| | АН | | | | | | | | |
| | AI | ↓ | | | | | | | |
| | AJ | ↓ | | | | | | | |
| | AK | <u> </u> | | | | | | | |
| | | | | FOREIGN P | ATENT DOCUMENTS | | | | |
| EXAMINER INITIAL | | DOCT | JMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | |
| | AL | | | | | | | Yes No | |
| | AM | | | | | | | Yes No | |
| - | AN | | | | | | | Yes No | |
| | AO | | | | | | | Yes | |
| | AP | | | | | | | No Yes | |
| | AF | Щ. | Pure (Includin | | l tle, Date, Pertinent Pag | | | No | |
| | AR | 75 | | ew Additions | to the Creator™ Platford | | | 16:1-4, | |
| | AS | S 75 CLONTECH, "New Creator™ -Compatible Expression Systems," CLONTECHniques 15:2 pages, CLONTECH (2000). | | | | | | | |
| | AT | <u>75</u> | CLONTECH, "Cr pages, CLONTE | reator™ Accep 3CH (2001). | otor Vector Construction | Kit" C | LONTECHnique | es 16:2 | |
| EXAMINER | | | | | | DATE (| CONSIDERED | | |



FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM

APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

FILING DATE November 12, 1999 GROUP 1636

| | | | | | November 12, 1999 | | .636 | |
|---------------------|----|----------|----------------|--|---|-----------------------------|--------------|-------------|
| | | | | U.S. PA | TENT DOCUMENTS | | | |
| EXAMINER INITIAL | | DOCT | UMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DAT |
| | AA | 1 | | | | | | |
| | AB | | | | | | | |
| | AC | | | | | | | |
| | AD | | | | | | | |
| | AE | | | | | | | |
| | AF | | | | | | | |
| | AG | | · | | | | | |
| | AH | | | ļ | | | | |
| | AI | | _ | | | | | |
| | AJ | | | | | · | | |
| | AK | | | L | <u> </u> | | 1 | |
| | Т | | | FOREIGN | PATENT DOCUMENTS | | | |
| XAMINER NITIAL | | DOC | JMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATIO |
| | AL | | | | | | | Y(|
| | АМ | | | | | | | Y (|
| | AN | | | | | | | Y (|
| | AO | | | | | | | Ye |
| | AP | | | | | | | Ye |
| | | 07 | THER (Includin | g Author, T | itle, Date, Pertinent | Pages, etc | .) | <u>.</u> |
| | AR | 76 76 | CLONTECH, "Co | ECH (2001). reator™: The resentation, | Universal Platform pp. 1-9, CLONTECH (products/families/cr | for Analysi: 2001), avai | s of Gene Fi | unction," |
| | AT | 76 | CLONTECH, "C1 | reator™ pDNR | -Dual Cloning Kit," | CLONTECHniq | ues 16:3 pag | ges, CLONTE |
| XAMINER | | | | | | DATE C | | |





FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

next communication to Applicant.

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM

APPLICATION NO. 09/438,358

APPLICANT Gerard et al.

FILING DATE November 12, 1999 GROUP 1636

| | | | | U.S. PAT | ENT DOCUMENTS | | | | |
|---------------------|----|--|-------------------------------|---------------|---|---------------------|--------------|-------------|--|
| EXAMINER INITIAL | | DOCU | MENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE | |
| | AA | | | | | | | | |
| | AB | | | | | | | | |
| | AC | | | | | | | | |
| | AD | | - | | | | | | |
| | AE | | | | | | | | |
| | AF | | | | _ | | | | |
| | AG | | | | | L | | | |
| | AH | | | | | | | | |
| | AI | <u> </u> | | | | | | : | |
| | AJ | | | | | | | | |
| | AK | <u></u> | | | | | | | |
| | | · | | FOREIGN P | ATENT DOCUMENTS | | | · | |
| EXAMINER INITIAL | | DOCU | MENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | |
| | AL | | | | | | | Yes No | |
| | AM | | | | | | | Yes No | |
| | AN | | | | | | | Yes No | |
| | AO | | | | | | | Yes No | |
| | AP | | | | | | | Yes No | |
| | AF | | THER (Including | g Author Ti | tle, Date, Pertinent Pag | es etc | <u> </u> | l NO | |
| | AR | <u>77</u> | Collis, C.M. Integrated Ca | and Hall, R. | M., "Expression of Anti Integrons," Antimicrobia ociation for Microbiolog | biotic : 1 Agent | Resistance (| | |
| | AS | Cormack, B., "Directed Mutagenesis Using the Polymerase Chain Reaction," in Current Protocols in Molecular Biology, Ausubel, F.M., et al., eds., John Wiley Sons, Inc., New York, NY, pp. 8.5.1-8.5.10 (January 1997). | | | | | | | |
| EVANTAGE | AT | <u>77</u> | | ion in limite | croSAGE: a modified proed amounts of tissue," <i>N</i> (March 1999). | ucl. Ac | ids Res. 27 | | |
| EXAMINER | | | | | | DATE (| CONSIDERED | | |

Page 12 of 44



FORM PTO-1449

FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

| ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM | APPLICATION NO. 09/438,358 |
|--|----------------------------|
| APPLICANT Gerard et al. | |
| FILING DATE | GROUP |

| | | | | | November 12, 1999 | | .636 | | |
|---------------------|----|--------------|--|---|---|----------|------------------------------|------------------|--|
| | | | | U.S. PAT | ENT DOCUMENTS | | | | |
| EXAMINER | | | | | | | | | |
| INITIAL | - | DOCU | MENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE | |
| | AA | ļ | | | | <u> </u> | | | |
| ····· | AB | | | | | | | | |
| · | AC | - | _ · | | | | | | |
| | AD | - | | | | | | | |
| | AE | | | | | <u> </u> | | | |
| | AF | | | | | | | | |
| | AG | | | | | | | | |
| | AH | | | | | <u> </u> | | | |
| | AI | - | | | | | | | |
| | AJ | | | | | | | | |
| | AK | | | | | | | | |
| | T | т | | FOREIGN PA | ATENT DOCUMENTS | γ | | | |
| EXAMINER INITIAL | | DOCU | MENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | |
| | | | | | | | | Yes | |
| | AL | | | | | | | No | |
| | | | | | | | | Yes | |
| | AM | | | | | | | No | |
| | AN | | | | | | | Yes No | |
| | | | | | | | | Yes | |
| | AO | <u> </u> | · · · · · · · · · · · · · · · · · · · | | | | | No | |
| | AP | | | | • | | | Yes | |
| | AP | | TUPP /T-al-di- | - Number Mid | l Pote Postinost Pos | <u> </u> | | No | |
| | 1 | 0, | HER (Including | g Author, Ti | tle, Date, Pertinent Pag | es, etc | .) | | |
| | AR | <u>78</u> | cerevisiae Do | ominant Letha n. <i>273</i> :849-85 | lysis of the Mechanisms 1 <i>cdc42</i> ^{G12V} and Dominant 8, The American Society | Negativ | e <i>cdc42</i> D118A I | Mutations," | |
| | AS | <u>78</u> | Cyanobacteria | Deng, MD., and Coleman, J.R., "Ethanol Synthesis by Genetic Engineering in Cyanobacteria," <i>Appl. Environ. Microbiol. 65</i> :523-528, American Society for Microbiology (February 1999). | | | | | |
| | АТ | <u>78</u> | Derbyshire, V coincidence, Sciences (Feb | Proc. Natl. | rt, M., "Lightning stril Acad. Sci. USA 95:1356 | ces twic | ce: Intron-i National Aca | ntein demy of | |
| EXAMINER | | | · | | | DATE C | ONSIDERED | | |

Page 13 of 44



FORM PTO-1449
FIFTH SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.

0942.4640001/RWE/BJD/JKM

APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

FILING DATE

GROUP

| November 12, 1999 1636 | | | | | | | | |
|------------------------|--------------|--------------|--|--------------|---|--|------------------------------|---------------------------|
| | | | | U.S. PAT | ENT DOCUMENTS | | | |
| EXAMINER | | | | | | | | |
| INITIAL | | DOCU | MENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE |
| | AA | + | | | | | | |
| | AB | + | | | | - | | |
| | AC | +- | | | | | | |
| | AD | ┼ | | | | <u> </u> | | |
| | AE | ┼ | | | | - | | |
| | AF | - | | | | ļ | | |
| | AG | - | | | | <u> </u> | - | |
| | AH | | | | | } | | |
| | AJ | + | | | | <u> </u> | | |
| | AK | + | | | | | | |
| | AK | 1 | | | | | <u> </u> | L |
| DVAMENED | Т | T | | FOREIGN PA | ATENT DOCUMENTS | Τ | I | T |
| EXAMINER INITIAL | | DOCU | MENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
| | | | | | | | | Yes |
| | AL | | | | | | | No |
| | AM | | | | | | | Yes |
| | AM | + | | | | | | No |
| | AN | | | | | | | Yes No |
| | | | | | | | | Yes |
| | AO | <u> </u> | | | | | | No |
| | AP | | | | | | | Yes |
| | I AF | | PUPP (Tagludia | n Number Mid | tle Dete Bentinest Be | | <u> </u> | No |
| | γ | <u> </u> | THER (Including | g Author, Ti | tle, Date, Pertinent Pag | es, etc | .) | |
| | AR | <u>79</u> | Dijkema, R., interferon ge | et al., "Clo | oning and expression of tt." EMBO J. 4:761-767, | the chro | omosomal imm ss Limited (| nune (1985). |
| , | AS | <u>79</u> | Enquist, L.W., and Weisberg, R.A., "The Red Plaque Test: A Rapid Method for Identification of Excision Defective Variants of Bacteriophage Lambda," Virology 72: 147-153, Academic Press, Inc. (1976). | | | | | |
| | АТ | <u>79</u> | evolution of | a conserved | J.J., "The integrase f. active site domain," <i>Nu</i> September 1997). | amily o | f tyrosine r ds Res. 25:3 | ecombinases: 605-3614, |
| EXAMINER | | | | | | DATE (| ONSIDERED | |

Page 14 of 44



FORM PTO-1449

FIFTH SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM

APPLICATION NO. 09/438,358

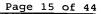
APPLICANT Gerard et al.

FILING DATE

November 12, 1999

GROUP 1636

| | | | | U.S. P | ATENT DOCUMENTS | | | | |
|---------------------|----|----------|---|--|---|---------------|--------------|-------------|--|
| EXAMINER INITIAL | | DOCU | MENT NUMBER | DATE | NAME | CLAS | S SUB-CLASS | FILING DATE | |
| | AA | - | | | | | | | |
| | AB | <u>.</u> | | | | | | | |
| | AC | | | | | | | | |
| - | AD | _ | | | | | | | |
| | AE | | | | | | | | |
| | AF | | ···· | | | | | | |
| | AG | | | | | | | <u> </u> | |
| | AH | | | | | | | <u> </u> | |
| | AI | | | | | | | | |
| | AJ | | | | | | | | |
| | AK | | | | | | | | |
| | | | | FOREIGN | PATENT DOCUMENTS | | | | |
| EXAMINER INITIAL | | DOCU | MENT NUMBER | DATE | COUNTRY | CLAS | S SUB-CLASS | TRANSLATIO | |
| | AL | | | | | | | Ye N | |
| | AM | | | | | | | Ye | |
| | AN | | | | | | | Ye | |
| | AO | | | | | | | Ye N | |
| | AP | | | | | | | Ye | |
| | | 01 | THER (Includin | g Author, T | itle, Date, Perti | nent Pages, | tc.) | | |
| | AR | 80 | Molecular Bi | ology , Ausi | Derived from Plas ubel, F. M., et a 17 (January 1998) | 1., eds., Joh | | | |
| | AS | 80 | specific Rec | Flanagan, P.M., and Fennwald, M.A., "Analysis of Inhibitors of the Sitespecific Recombination Reaction Mediated by Tn3 Resolvase," J. Mol. Biol. 206:295-304, Academic Press (1989). | | | | | |
| | AT | 80 | Flores, A., et al., "A protein-protein interaction map of yeast RNA polymerase III," Proc. Natl. Acad. Sci. USA 96:7815-7820, National Academy of Sciences (July 1999). | | | | | | |
| EXAMINER | | 1 | <u> </u> | | | | E CONSIDERED | | |



JAN 2 2 2004 W

FORM PTO-1449
FIFTH SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

0942.4640001/RWE/BJD/JKM

APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

FILING DATE November 12, 1999

ATTY. DOCKET NO.

GROUP 1636

| | | | | U.S. PAT | ENT DOCUMENTS | | | |
|---------------------|-------------|----------|-------------------------------|--|---|--------------------|------------------------------|--------------------|
| EXAMINER INITIAL | | DOCU | MENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE |
| | AA | | | | | | | |
| | AB | | | | | <u> </u> | | |
| | AC | | | | | | | |
| | AD | | | | | | | |
| | AE | ļ | | | | | | |
| | AF | ļ | | | | ļ | | |
| | AG | - | | | | | | |
| | AH | ļ | | <u> </u> | | | | |
| | AI | ┼— | | | | | | |
| <u> </u> | AJ | - | | | | ļ | | |
| | AK | | | l | | | | |
| | | T | | FOREIGN P. | ATENT DOCUMENTS | | 1 | <u> </u> |
| EXAMINER INITIAL | <u> </u> | DOCU | MENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
| | AL | | | | | | | Yes No |
| | AM | | | | | | | Yes No |
| | AN | | | | | | | Yes No |
| | AO | | | | | | | Yes |
| | | | | | | | | No Yes |
| | AP | | | | | | | No |
| | AR | 81 | Francia, M.V Single-Strand | ., et al., "I | The Intll Integron Integree attC Site, " J. Bacter (November 1999). | rase Pr | eferentially | |
| | AS | 81 | Instruction N | Gateway™ Cloning Technology, Version 1, GIBCO BRL, Life Technologies Instruction Manual, [retrievable from <http: gateway="" www.lifetech.com="">], pp. 1-60 (November 1999).</http:> | | | | |
| | AT | 81 | Sequence Eler | ments in Gram | ve Selection Procedure for J . Tobiology (1985). | or Entra Bacter | apment of Ir iol. 164:918 | nsertion 3-921, |
| EXAMINER | | | | | | DATE (| CONSIDERED | |



TRANSLATION

Yes

No



EXAMINER INITIAL

EXAMINER INITIAL

AA
AB
AC
AD
AE
AF
AG
AH
AI
AJ

AL

FORM PTO-1449

DOCUMENT NUMBER

FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

DATE

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM 09/438,358

APPLICANT
Gerard et al.

FILING DATE
NOVEMBER 12, 1999 1636

U.S. PATENT DOCUMENTS

E NAME CLASS SUB-CLASS FILING DATE
NAME CLASS SUB-CLASS FILING DATE

A SUB-CLASS FILING DATE

DOCUMENT NUMBER DATE COUNTRY CLASS SUB-CLASS

AM Yes No
AN Yes No
AO Yes No
AO Yes No
No
No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

Gay, P., et al., "Cloning Structural Gene sacB, Which Codes for Exoenzyme Levansucrase of Bacillus subtilis: Expression of the Gene in Escherichia coli," J. Bacteriol. 153:1424-1431, American Society for Microbiology (1983).

AS B2 Gorman, C.M., et al. "The Rous sarcoma virus long terminal repeat is a strong promoter when introduced into a variety of eukaryotic cells by DNA-mediated transfection," Proc. Natl. Acad. Sci. USA 79:6777-6781, National Academy of Sciences (1982).

Grindley, N.D.F., and Kelley, W.S., "Effects of Different Alleles of the E. coli K12 polA Gene on the Replication of Non-transferring Plasmids," Molec. Gen. Genet. 143:311-318, Springer Verlag (1976).

EXAMINER

DATE CONSIDERED





FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

| ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM | APPLICATION NO. 09/438,358 |
|---|----------------------------|
| APPLICANT Gerard et al. | |
| FILING DATE | GROUP |

| | | | | · | November 12, 1999 | 1 | .636 | |
|-----------------------|-----|-----------|--|---|--|----------|------------------------------|------------------------|
| U.S. PATENT DOCUMENTS | | | | | | | | |
| EXAMINER INITIAL | | DOCU | MENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE |
| | AA | | | | | | | |
| - | АВ | | | | | | | |
| | AC | | | | | | | |
| | AD | <u> </u> | | | | | | |
| | AE | <u> </u> | | | | | | |
| | AF | <u> </u> | | | | | | |
| | AG | | | | | | | |
| | AH | ↓ | | | | _ | | |
| | AI | ļ | | | | ļ | | |
| | AJ | <u> </u> | | | | | | |
| | AK | | | | | | | |
| | 1 | Τ | | FOREIGN PA | ATENT DOCUMENTS | T | | I |
| EXAMINER INITIAL | ļ | DOCU | MENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
| | AL | | | | | | | Yes No |
| | AM | | | | | | | Yes No |
| | AN | | | | | | | Yes No |
| | AO | | | | | | | Yes No |
| | AP | | | | | | | Yes No |
| | _1_ | 07 | HER (Including | Author, Tit | cle, Date, Pertinent Pag | es etc | 1 | INO. |
| | AR | 83 | Gronostajski, Plasmid of Ye | R.M., and S | adowski, P.D., "The FLP and Intramolecular Reac ican Society of Biologio | Protein | of the 2-m J. Biol. Ch | nem. |
| | AS | <u>83</u> | recombinase h | Haffter, P., and Bickle, T.A., "Enhancer-independent mutants of the Cin recombinase have a relaxed topological specificity," <i>EMBO J</i> . 7:3991-3996, IRL Press (1988). | | | | |
| | АТ | 83 | Hancock, R.E. defenses," Pr Sciences (20 | oc. Natl. Ac | t, M.G., "The role of an ad. Sci. USA 97:8856-886 | ntimicro | obial peptid ional Academ | des in animal ny of |
| EYAMINED | I | | <u> </u> | | ····- | DAME (| ONCIDEDED | |

DATE CONSIDERE



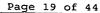
JAN 2 2 2004 W

FORM PTO-1449

FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

| ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM | APPLICATION NO. 09/438,358 |
|---|----------------------------|
| APPLICANT Gerard et al. | |
| FILING DATE November 12, 1999 | GROUP 1636 |

| <u>IN.</u> | FORMATI | ON DIS | SCLOSURE STATE | <u>MENT</u> | FILING DATE GROUP November 12, 1999 1636 | | | | |
|---------------------|----------|--------|--|--|--|------------------------------|----------------------------|------------------------|--|
| | | | | U.S. P | ATENT DOCUMENTS | | | | |
| EXAMINER INITIAL | | DOC | UMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE | |
| | AA | | | | | | | | |
| | AB | | | | | | | | |
| | AC | | | | | | | | |
| | AD | | | | | | | | |
| | ΑE | | | | | | | | |
| | AF | -↓ | | | | | | | |
| | AG | | | | | | | | |
| | AH | | | | | | | | |
| | AI | | | | | | | | |
| | AJ | | | | | | | | |
| | AK | | | | | | | | |
| | | | | FOREIGN | PATENT DOCUMENTS | | | | |
| EXAMINER INITIAL | | DOC | UMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | |
| | AL | · | | | | | | Yes No | |
| | AM | | | | | | | Yes No | |
| | AN | | | | | | | Yes No | |
| | AO | | | | | | | Yes No | |
| | AP | | | | | | | Yes No | |
| | | 0 | THER (Includir | g Author, T | itle, Date, Pertine | nt Pages, etc | 1.) | 110 | |
| | AR | 84 | Henikoff, S. breakpoints | , "Unidirect for DNA sequ | tional digestion wit uencing," <i>Gene 28</i> :35 | h exonucleas 1-359, Elsev | e III creat ier Science | es targeted (1984). | |
| | AS | 84 | Recombinant | Hochuli, E., et al., "Genetic Approach to Facilitate Purification of Recombinant Proteins with a Novel Metal Chelate Adsorbent," Bio/Technology 6:1321-1325, Nature Publishing Company (1988). | | | | | |
| | AT | 84 | Hoess, R.H., and Abremski, K., "Interaction of the bacteriophage Pl recombinase Cre with the recombining site loxP," Proc. Natl. Acad. Sci. USA 81:1026-1029, National Academy of Sciences (1984). | | | | | | |
| EXAMINER | <u> </u> | | I | | | DATE | CONSIDERED | | |





FORM PTO-1449
FIFTH SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM

APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.
FILING DATE

GROUP 1636

November 12, 1999 U.S. PATENT DOCUMENTS EXAMINER INITIAL DOCUMENT NUMBER DATE NAME CLASS SUB-CLASS FILING DATE AΑ AΒ AC ΑD ΑE ΑF AG AΗ ΑI АJ ΑK FOREIGN PATENT_DOCUMENTS EXAMINER INITIAL DOCUMENT NUMBER DATE COUNTRY CLASS SUB-CLASS TRANSLATION Yes ALNo Yes ΑM No AN No Yes ΑO No Yes ΑP No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Iida, S., et al., "A site-specific, conservative recombination system carried by bacteriophage P1. Mapping of the recombinase gene cin and the crossover AR <u>85</u> sites cix for the inversion of the C segment." EMBO J. 1:1445-1453, IRL Press Limited (1982). Iino, T., and Kutsukake, K., "Trans-acting Genes of Bacteriophages Pl and Mu Mediate Inversion of a Specific DNA Segment Involved in Flagellar Phase AS <u>85</u> Variation of Salmonella," Cold Spring Harbor Symposia on Quantitative Biology 45: 11-16, Cold Spring Harbor Laboratory (1981). Johnson, R.C., et al., "Isolation of the gene encoding the Hin recombinational enhancer binding protein," Proc. Natl. Acad. Sci. USA 85:3484-3488, National AT <u>8.5</u> Academy of Sciences (1988). EXAMINER DATE CONSIDERED



JAN 2 2 2004 BY

FORM PTO-1449

FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

| ATTY. DOCKET NO. | APPLICATION NO. |
|--------------------------|-----------------|
| 0942.4640001/RWE/BJD/JKM | 09/438,358 |
| APPLICANT | |
| Gerard et al | |

APPLICANT
Gerard et al.

FILING DATE
November 12, 1999

1636

| | | | | U.S. PAT | TENT DOCUMENTS | | | | |
|---------------------|-------------|-----------|----------------|--|--|----------|--------------|--------------------------|--|
| EXAMINER INITIAL | | DOCT | JMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE | |
| | AA | | | | | 0 | 002 02 | 111111 | |
| | AB | | | | | | | | |
| | AC | | | | | | <u> </u> | | |
| | AD | 1 | | | | | | | |
| | AE | | | | | | | | |
| | AF | | | | | | | | |
| | AG | | | | | | | | |
| | AH | | | | | | | | |
| | AI | | | | | | | | |
| | AJ | | | | | | | | |
| | AK | | | | | | | | |
| | | | | FOREIGN P | ATENT DOCUMENTS | | | | |
| EXAMINER | | | | | | | | | |
| INITIAL | - | DOCU | JMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | |
| | AL | <u> </u> | | | | | | Yes No | |
| <u></u> | АМ | | | | | [! | | Yes No | |
| | AN | | | | | | | Yes No | |
| | AO | | | | | | | Yes | |
| | | | | | | | | No Yes | |
| | AP | <u> </u> | | | | <u> </u> | | No | |
| | | OT | HER (Including | g Author, Tit | tle, Date, Pertinent Page | es, etc | .) | | |
| | AR | <u>86</u> | genetics in G | Gram-negative | ide-host-range suicide ve e bacteria: inactivation 9:137-141, Elsevier Scier | of the | blaA gene c | ; reverse of Yersinia | |
| | AS | <u>86</u> | att sites of | Katz, L., et al., "Site-specific recombination in Escherichia coli between the att sites of plasmid pSE211 from Saccharopolyspora erythraea," Mol. Gen. Genet. 227: 155-159, Springer-Verlag (1991). | | | | | |
| | АТ | 86 | nonpolyketide | e-producing p | roduction of polyketide norokaryotic and eukaryoticional Academy of Sciences | ic hosts | s," Proc. Na | | |
| EXAMINER | | | | | | DATE (| CONSIDERED | | |





FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

| ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM | APPLICATION NO. 09/438,358 |
|---|----------------------------|
| APPLICANT Gerard et al. | |
| FILING DATE November 12, 1999 | GROUP |

| | | | | | NOVELLDET 12, 1999 | | 1030 | |
|---------------------|--------------|--|--|-------------------------------|---|----------|-------------|-------------|
| | | | | U.S. PAT | TENT DOCUMENTS | | | |
| EXAMINER INITIAL | | DOCT | UMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE |
| | AA | | | | | | | |
| | AB | | | | | † | | |
| | AC | | | | | | | |
| | AD | | | | | † | <u> </u> | |
| | AE | | | | | | | |
| | AF | | | | | 1 | | |
| | AG | | | | | T | | |
| | АН | | | | | | | |
| | AI | | | | | Ī | | |
| | AJ | | | | | | | |
| | AK | | | | | | | |
| | | | | FOREIGN P | ATENT DOCUMENTS | | | |
| EXAMINER | | | | | | | | |
| INITIAL | | DOCU | UMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
| · | AL | <u> </u> | | | | | | Yes No |
| | AM | | 1 | | | | | Yes No |
| | AN | | | | | | , | Yes |
| | | | | | | | | No Yes |
| | AO | ┼ | | | | <u> </u> | | ^ No |
| | AP | | ! | 1 | | | 1 | Yes No |
| | | 70 | THER (Including | g Author, Ti | tle, Date, Pertinent Pag | res, etc |) | |
| i | AR | OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Kholodenko, B.N., et al., "Metabolic Design: How to Engineer a Living Cell to Desired Metabolite Concentrations and Fluxes," Biotechnol. Bioengineer. 59:239-247, John Wiley & Sons (July 1998). | | | | | | |
| | AS | <u>87</u> | Kim, D.W., "Use of the human elongation factor lα promoter as a versatile and efficient expression system," <i>Gene 91</i> :217-223, Elsevier Science B.V. (1990). | | | | | |
| | AT | <u>87</u> | Klippel, A. ϵ The EMBO Jour | et al., "Isol nal 7: 3983- | lation and characterizati 3989, IRL Press Inc. (19 | ion of 1 | ınusual gin | mutants," |
| EXAMINER | | | | | | DATE (| CONCEDED | |



JAN 2 2 2004 W

FORM PTO-1449
FIFTH SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

next communication to Applicant.

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

FILING DATE November 12, 1999 GROUP 1636

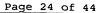
| | | | | | November 12, 1999 | | 1636 | |
|---------------------|---------------------------------------|-----|--|--------------|---|---------------------------|-----------------------------|-----------------------|
| | | | | U.S. PA | TENT DOCUMENTS | | · | |
| EXAMINER INITIAL | | DOC | UMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DAT |
| | AA | | | | | | | |
| | AB | | | | | | | |
| | AC | | | | | | | |
| | AD | | | | | | | |
| | AE | | | | | | | |
| | AF | | | | | | | |
| | AG | | | | | | | |
| | AH | | · | | | | | |
| | AI | | | | | | | |
| | AJ | | | | | | | |
| | AK | | | | | | | |
| | | | | FOREIGN I | PATENT DOCUMENTS | | | |
| EXAMINER INITIAL | | DOC | UMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATIO |
| | AL | | | | | | | Ye N |
| | AM | | | | | | | Ye N |
| | AN | | | | | | | Ye N |
| | AO | | | | | | | Ye N |
| | AP | | | | | | - | Ye N |
| | · · · · · · · · · · · · · · · · · · · | 0' | THER (Includin | g Author Ti | tle, Date, Pertinent | Dogge et e | <u> </u> | 1 |
| | AR | 88 | inversion: C | loning and c | richia coli host fact haracterization of th ational Academy of Sc | e fis gene | " Proc. Na | DNA t1. Acad. |
| | AS | 88 | Kolb, A.F., and Siddell, S.G., "Genomic targeting with an MBP-Cre fusion protein," <i>Gene 183</i> :53-60, Elsevier Science B.V. (1996). | | | | | |
| | AT | 88 | Kouprina, N., in Vivo Recon Laboratory Pr | mbination in | escue of Targeted Reg. Yeast," <i>Genome Res.</i> 998). | ions of Man 8:666-672, | nmalian Chro Cold Spring | omosomes by Harbor |
| XAMINER | | | 1 | | | DATE C | CONSIDERED | |



FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

| ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM | APPLICATION NO. 09/438,358 |
|---|----------------------------|
| APPLICANT Gerard et al. | |
| FILING DATE November 12, 1999 | GROUP 1636 |

| | | | | | November 12, 1999 | | 1636 | | |
|---------------------|----|--------------|---|--|--|----------------|----------------------|---------------|--|
| | | | | U.S. PAT | TENT DOCUMENTS | | | | |
| EXAMINER INITIAL | | DOC | UMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE | |
| | AA | | | | | | | | |
| | AB | | | | | | | | |
| | AC | | | | | | | | |
| | AD | ļ | | | | ļ | | | |
| | AE | | | | | | | | |
| | AF | | | | | ļ | | | |
| | AG | ļ | | | | | | | |
| · | AH | | | | | | | | |
| - | AI | | | | | ļ | | , | |
| | AJ | +- | | · · · · · · · · · · · · · · · · · · · | | | | | |
| | AK | <u> </u> | | <u> </u> | | <u> </u> | <u> </u> | | |
| EVAMINED | Т | 1 | | FOREIGN PA | ATENT DOCUMENTS | <u> </u> | ı | I | |
| EXAMINER INITIAL | | ·DOC | JMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | |
| | AL | | | | | | | Yes No | |
| | АМ | | | | | | | Yes No | |
| | AN | | | | | | | Yes No | |
| | AO | | | | | | - | Yes | |
| | AO | | | | | | | No | |
| | AP | <u> </u> | | | | <u>.</u> | | Yes No | |
| | | 07 | THER (Including | Author, Tit | cle, Date, Pertinent Pag | es, etc | .) | | |
| | AR | <u>89</u> | Krautwald, S., and Baccarini, M., "Bacterially Expressed Murine CSF-1 Possesses Agonistic Activity in its Monomeric Form," <i>Biochem. Biophys. Res. Commun.</i> 192: 720-727, Academic Press (1993). | | | | | | |
| | AS | 89 | Langeveld, S. yeast <i>Sacchar</i> (1985). | Langeveld, S.A. et al., "Expression of an Escherichia coli phr gene in the yeast Saccharomyces cerevisiae," Mol. Gen. Genet. 199: 396-400, Springer-Verlag (1985). | | | | | |
| | AT | <u>89</u> | replication t | erminus regi | t, D.J., "Site-specific on of <i>Escherichia coli</i> : 0, Oxford University Pre | functions (199 | onal replace 95). | he ment of | |
| EXAMINER | | | | | | I DATE C | ONSTDERED | 1 | |





FORM PTO-1449
FIFTH SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

0942.4640001/RWE/BJD/JKM

APPLICATION NO. 09/438,358

APPLICANT

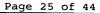
Gerard et al.

FILING DATE November 12, 1999

ATTY. DOCKET NO.

GROUP 1636

| | | | | U.S. PAT | PENT DOCUMENTS | | | | |
|---------------------------------------|-------------|--|--------------------------------|---|--|----------|-------------|----------------|--|
| EXAMINER | | | | | | |] | | |
| INITIAL | | DOC | UMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE | |
| | AA | - | | | | | | | |
| | AB | | | | | <u> </u> | | · | |
| | AC | - | | | | ļ | | | |
| | AD | + | | | | <u> </u> | ļ | | |
| | AE | | | | | <u> </u> | | · | |
| | AF | | | | | | | | |
| | AG | + | | | | | | | |
| | AH | | | | | <u> </u> | | | |
| | AI | +- | | | | | | | |
| | AJ AK | | | <u> </u> | | | <u> </u> | | |
| | AK | | | TODATO: D | | <u> </u> | | | |
| EXAMINER | | 1 | <u>-</u> | FOREIGN PA | ATENT DOCUMENTS | F | <u> </u> | <u> </u> | |
| INITIAL | | DOCU | JMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | |
| | | | - | | | | | Yes | |
| · · · · · · · · · · · · · · · · · · · | AL | - | | | | | | No | |
| | AM | | | | | | | Yes | |
| | 1 | | | | | - | | No Yes | |
| | AN | | | | | | | No | |
| | AO | | | | | | | Yes | |
| | 10 | | | | | | | No. | |
| | AP | | | | | | | Yes No | |
| | | 07 | THER (Including | Author, Tit | le, Date, Pertinent Pag | es, etc | .) | | |
| | AR | 90 | to the Discov | Leung, L.L.K., "Application of Combinatorial Libraries and Protein Engineering to the Discovery of Novel Anti-Thrombotic Drugs," Thromb. Haemost. 74:373-376, F.K. Schattauer Verlagsgesellschaft mbH (1995). | | | | | |
| | AS | 90 | gene deletion embryonic ste | Li, ZW., et al., "Generation of mice with a 200-kb amyloid precursor protein gene deletion by Cre recombinase-mediated site-specific recombination in embryonic stem cells," <i>Proc. Natl. Acad. Sci. USA</i> 93:6158-6162, National Academy of Sciences (1996). | | | | | |
| | АТ | 90 | contains two | independent | ., "Conjugative transpos DNA binding domains that 41-1548, Oxford Universi | recogn | ize differe | rase nt DNA | |
| EXAMINER | | | | | | DATE | ONSIDERED | | |



JAN 2 2 2004 W

FORM PTO-1449
FIFTH SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

next communication to Applicant.

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM

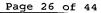
APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

FILING DATE November 12, 1999 GROUP 1636

| | | | | | November 12, | 1999 | [: | 1636 | |
|---------------------|---------|-----------|------------------------------------|--|------------------------------|------------|----------|-------------|-------------|
| | | | | U.S. PA | FENT DOCUMENTS | | | | |
| EXAMINER INITIAL | | DOC | UMENT NUMBER | DATE | NAME | | CLASS | SUB-CLASS | FILING DAT |
| - | AA | | | | | | | | |
| | AB | | | | | | | | |
| | AC | | | | | | | | |
| | AD | | | | | | Ι | | |
| | AE | | | | | | | | |
| | AF | | | | | | | | |
| | AG | | | | | | | | |
| | AH | | | | | | | | |
| | AI | | | | | | | | |
| | AJ | | | | | | | | |
| | AK | | | | | | | | |
| | | | | FOREIGN P | ATENT DOCUMENT | rs | | | |
| EXAMINER INITIAL | | DOC | JMENT NUMBER | DATE | COUNTRY | | CLASS | SUB-CLASS | TRANSLATIO |
| | AL | | | | | | | | Ye N |
| | АМ | | | | | | | | Ye N |
| | AN | ļ | <u>.</u> | | | | | | Ye N |
| | AO | | <u> </u> | | | | | | Ye N |
| | AP | | | |] | | | | Ye |
| | | | WED / T144- | - 3: 13: 5: | | | 1 | <u> </u> | N |
| | AR | 91 | Hydroxyalkan | Madison, L.L., and Huisman, G.W., "Metabolic Engineering of Poly(3-Hydroxyalkanoates): From DNA to Plastic," Microbiol. Mol. Biol. Rev. 63:21-53, American Society for Microbiology (March 1999). | | | | | |
| | AS | <u>91</u> | PAS Domain Proposed Domain, " J. 1 | Maemura, K., et al., "Generation of a Dominant-negative Mutant of Endothelial PAS Domain Protein 1 by Deletion of a Potent C-terminal Transactivation Domain," J. Biol. Chem. 274:31565-31570, The American Society for Biochemistry and Molecular Biology (October 1999). | | | | | |
| | AT | 91 | sequencing: r | manipulation | abdivision of and DNA sequen | nce of tra | nsposab] | le elements | introducing |
| EXAMINER | | <u> </u> | <u> </u> | | | | DATE (| CONSIDERED | |



PADEMN

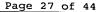
FORM PTO-1449

FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

| ATTY. DOCKET NO. | APPLICATION NO. |
|--------------------------|-----------------|
| 0942.4640001/RWE/BJD/JKM | 09/438,358 |
| APPLICANT | |
| Gerard et al | |

FILING DATE GROUP

| | · | | | | November 12, 1999 | | .636 | | |
|----------|--|--------------|--------------------------------|---|--|----------------------|--------------|--------------------|--|
| | | | | U.S. PAT | ENT DOCUMENTS | | | | |
| EXAMINER | | | | | | | | | |
| INITIAL | AA | Doce | JMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE | |
| | AB | 1 | | | | | | | |
| | AC | | - | <u> </u> | | - | | | |
| | AD | | | | | | | | |
| | AE | <u> </u> | | | | | | | |
| | AF | | - | | | | | | |
| | AG | | | | | | | | |
| | АН | | | | | | | | |
| | AI | | | | | | | | |
| | AJ | | | | | | | | |
| | AK | | | | | | | | |
| | | | | FOREIGN PA | ATENT DOCUMENTS | | | | |
| EXAMINER | | | | | | | | | |
| INITIAL | | DOCL | MENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | |
| · | AL | ļ | | | | | | Yes No | |
| | AM | | | | | | | Yes No | |
| | AN | | | | | | | Yes | |
| · | TAN . | | | | , | | | No Yes | |
| | AO | | | | | | | No | |
| | AP | | | | | | | Yes No | |
| | | 01 | THER (Includin | g Author, Tit | cle, Date, Pertinent Pag | es, etc | .) | | |
| | AR | 92 | Malynn, B.A., Immunoglobuli | et al., "Th n VDJ Recomb | e <i>scid</i> Defect Affects tl inase Mechanism," <i>Cell</i> | ne Final 54:453-4 | l Step of th | ne Tess (1988). | |
| | AS | 92 | Expression," | Maniatis, T., et al., "Regulation of Inducible and Tissue-Specific Gene Expression," <i>Science 236</i> :1237-1245, American Association for the Advancement of Science (1987). | | | | | |
| | АТ | 92 | Manning, P.A. 7:93-95, Else | , et al., "G vier Science | ene capture in <i>Vibrio cl</i> (March 1999). | nolerae, | " Trends Mi | crobiol. | |
| EXAMINER | | | | | | DATE C | ONSIDERED | i | |





FORM PTO-1449 FIFTH SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM APPLICATION NO. 09/438,358

APPLICANT Gerard et al.

FILING DATE

GROUP 1636

November 12, 1999 U.S. PATENT DOCUMENTS EXAMINER INITIAL DOCUMENT NUMBER DATE NAME CLASS SUB-CLASS FILING DATE AΑ AB AC AD ΑE AF AG AΗ ΑI АJ ΑK FOREIGN PATENT DOCUMENTS EXAMINER INITIAL DOCUMENT NUMBER DATE COUNTRY CLASS SUB-CLASS TRANSLATION ALNo Yes ΑM No Yes AN No Yes AO No Yes ΑP No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Mendiola, M.V., and de la Cruz, F., "Specificity of insertion of IS91, an AR <u>93</u> insertion sequence present in α-haemolysin plasmids of Escherichia coli," Mol. Microbiol. 3:979-984, Blackwell Scientific Publications (1989). Mercier, J., et al., "Structural and Functional Characterization of tnpI, a Recombinase Locus in Tn21 and Related β -Lactamase Transposons," J. Bacteriol. AS 93 172:3745-3757, American Society for Microbiology (1990). Metcalf, W.W., et al., "Conditionally Replicative and Conjugative Plasmids ΑТ <u>93</u> Carrying lacZα for Cloning, Mutagenesis, and Allele Replacement in Bacteria," Plasmid 35:1-13, Academic Press (1996). EXAMINER DATE CONSIDERED



JAN 2 2 2004 B

FORM PTO-1449

FIFTH SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM

APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

FILING DATE November 12, 1999 GROUP 1636

| | | | | U.S. PAT | ENT DOCUMENTS | | | | |
|---------------------|------|--|---|---|--------------------------|---------|-----------|-------------|--|
| EXAMINER INITIAL | | DOCU | JMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE | |
| | AA | | | | | | | | |
| | AB | | | | | | | | |
| | AC | | | | | | | | |
| | AD | ļ | | | | | | | |
| | AE | <u> </u> | | | | | | | |
| | AF | | | | | | | | |
| | AG | ļ | | | | | | | |
| | АН | | | | | | | | |
| | AI | | | | | | | | |
| | AJ | | | | | | | | |
| <u></u> | AK | | | | | | | | |
| | | | | FOREIGN PA | ATENT DOCUMENTS | | | - | |
| EXAMINER INITIAL | | DOCU | MENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | |
| | AL | | | | | | | Yes No | |
| | AM | | | | | | | Yes No | |
| | AN | | | | | | | Yes No | |
| | AO | | | | | | | Yes | |
| | I AU | | | | | | | No | |
| | AP | | | | | | | Yes No | |
| | | ro | HER (Including | Author, Tit | le, Date, Pertinent Page | es, etc | .) | | |
| | AR | <u>94</u> | Mette, M.F., triggered by Press (2000). | Mette, M.F., et al., "Transcriptional silencing and promoter methylation triggered by double-stranded RNA," $\it EMBO\ J.\ 19:5194-5201$, Oxford University | | | | | |
| | AS | <u>94</u> | affinity chro | Meyer-Leon, L., et al., "Purification of the FLP site-specific recombinase by affinity chromatography and re-examination of basic properties of the system," Wucl. Acids Res. 15:6469-6488, IRL Press (1987). | | | | | |
| | AT | 94 Miller, H.I. et al., "int-h: an int Mutation of Phage λ That Enhances Site-Specific Recombination," Cell 20: 721-729, MIT (1980). | | | | | | | |
| EXAMINER | | | | | | DATE C | ONSIDERED | | |





FORM PTO-1449
FIFTH SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM

APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

FILING DATE November 12, 1999 GROUP 1636

| | | | | U.S. PAT | TENT DOCUMENTS | | | | |
|---------------------|-------------|---|----------------|---|--|----------|---------------|-------------|--|
| EXAMINER INITIAL | Τ | DOCT | UMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE | |
| | AA | T | | | | | | | |
| | AB | | | | | | | | |
| | AC | | | | | <u> </u> | <u> </u> | | |
| | AD | | | | | T | | | |
| | AE | Ι | | | | | | | |
| | AF | <u> </u> | | | | | | | |
| | AG |] | | | | | | | |
| | AH | | | | | | | | |
| | AI | | | | | | | | |
| | AJ | | | | | | | | |
| | AK | | | | | | | | |
| | | | | FOREIGN P | ATENT DOCUMENTS | | | | |
| EXAMINER INITIAL | | DOCT | UMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | |
| | AL | | | | | | | Yes No | |
| | АМ | | | | | | | Yes No | |
| | AN | | | | | | | Yes No | |
| | AO | | | | | | | Yes No | |
| | AP | | | | | | | Yes No | |
| | | 07 | THER (Includin | g Author, Ti | tle, Date, Pertinent Pag | es, etc |) | <u> </u> | |
| | AR | OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Mizushima, S., and Nagata, S., "pEF-BOS, a powerful mammalian expression vector," Nucl. Acids Res. 18:5322, Oxford University Press (1990). | | | | | | ession | |
| | AS | <u>95</u> | csrA and a Pr | Murayama, N., et al., "Evidence for Involvement of Escherichia coli Genes pmbA, csrA and a Previously Unrecognized Gene tldD, in the Control of DNA Gyrase by letD (ccdB) of Sex Factor F," J. Mol. Biol. 256:483-502, Academic Press Limited (1996). | | | | | |
| | AT | <u>95</u> | Escherichia c | <i>coli</i> Protein 256:9246-9253 | n, C.A., "Purification an Factor Required for λ In B, American Society for E | ntegrati | ive Recombin | nation." J. | |
| EXAMINER | | | <u></u> | | | DATE (| CONSIDERED | | |



JAN 2 2 2004 ST

FORM PTO-1449

FIFTH SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM

/B.TD/.TKM 09/43

APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

FILING DATE November 12, 1999 GROUP 1636

| | | | | | NOVEMBEL 12, 1999 | | 1030 | | |
|---------------------|--|-----------|--------------------------------|---|---|--|-----------------------------|-------------------------|--|
| | | | | U.S. PAT | TENT DOCUMENTS | | | | |
| EXAMINER INITIAL | | DOCT | UMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE | |
| | AA | 1 | | | | | 1 | 1122110 2111 | |
| | AB | 1 | | † | | † | | | |
| | AC | | | | | † | 1 | | |
| | AD | | | | | | | | |
| | AE | | | | | | | | |
| | AF | | | | | | | | |
| | AG | | | | | | | | |
| | AH | | | | | | | | |
| | AI | | | | | | | | |
| | AJ | | | | | | | | |
| | AK | | · | | | | | | |
| | | | | FOREIGN P | ATENT DOCUMENTS | | | | |
| EXAMINER | |] | | | | | | | |
| INITIAL | + | DOCU | UMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | |
| | AL | <u> </u> | | | | | | Yes No | |
| | AM | | | | | | | Yes No | |
| | AN | | | | | | | Yes | |
| | | † | | | | | | No Yes | |
| | AO | + | | | | | | No | |
| | AP | | | | | Ì | | Yes No | |
| | | 07 | THER (Includin | g Author, Ti | tle, Date, Pertinent Pag | es, etc | .) | | |
| | OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Odell, J.T., et al., "Seed-Specific Gene Activation Mediated by the Cre/lox Site-Specific Recombination System," Plant Physiol. 106:447-458, American Society of Plant Physiologists (1994). | | | | | | | | |
| | AS | <u>96</u> | Multiple Loci sphaeroides 2 | O'Gara, J.P., et al., "Identification and Molecular Genetic Analysis of Multiple Loci Contributing to High-Level Tellurite Resistance in Rhodobacter sphaeroides 2.4.1," Appl. Environ. Microbiol. 63:4713-4720, American Society for Microbiology (December 1997). | | | | | |
| | AT | <u>96</u> | Clone Library | / into Mammal | ., "Bacteriophage Lambda ian Cells," <i>Molecular a</i> or Microbiology (1985). | Vector nd Cell: | for Transdu ular Biology | cing a cDNA 5: 1136- | |
| EXAMINER | | | | | | 7,500 | OMOTORDED | | |



FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

| ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM | APPLICATION NO. 09/438,358 |
|--|----------------------------|
| APPLICANT Gerard et al. | |
| FILING DATE | CROUR |

| THE OWNER OF THE PARTY OF THE P | | | | | November 12, 1999 | | 1636 | |
|--|----------|--------------|--------------------------------|--|--|--|--|---------------------------|
| | | | | U.S. PAT | TENT DOCUMENTS | | | |
| EXAMINER INITIAL | | DOC | UMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE |
| | AA | \bot | | | | | | |
| | AB | | | | | | | |
| | AC | 4 | | • | | ļ | | |
| | AD | | | ļ | | ļ | | |
| | AE | ┿ | | <u> </u> | | | <u> </u> | |
| | AF | + | | <u> </u> | | | | |
| | AG | + | | | | | | <u> </u> |
| | AH | +- | | | | | <u> </u> | |
| | AI AJ | + | | | | | | |
| | AK | +- | | | | | | |
| | AK | | | FOREIGN D | ATENT DOCUMENTS | | <u>L</u> | |
| EXAMINER | | T | | FOREIGN FF | ATENI DOCUMENIS | Т | Τ | 1 |
| INITIAL | | DOCT | UMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
| | 1,7 | | | 1 | | | | Yes |
| | AL | + | | ' | | | | No |
| | AM | | | | | | | Yes No |
| | AN | | | | | | | Yes No |
| | AO | | | | | | | Yes No |
| | 1 | | | | | | | Yes |
| | AP | Щ_ | | | | | <u></u> | No |
| | | O? | THER (Including | g Author, Tit | tle, Date, Pertinent Pag | es, etc | :.) | |
| | AR | <u>97</u> | terminus is r | required to p | rification of two function promote Hin-mediated DNA Ford University Press (1) | invers | gions in Fis | 3: the N- \ excision," |
| | AS | <u>97</u> | Pal, S.K., et Number Contro | : al., "Pl Pl pl," J. Mol. | asmid Replication. Role Biol. 192:275-285, Acade | of Init | tiator Titra ess (1986). | ition in Copy |
| | AT | <u>97</u> | Toluene Metab | olism through | neering of Quasi-Natural th an <i>ortho</i> -Cleavage Degr 8-751, American Society | radation | n Pathwav." | Appl. |
| EXAMINER | | | | | | DATE (| CONSIDERED | |



JAN 2 2 2004

FORM PTO-1449

FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

next communication to Applicant.

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM

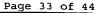
APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

FILING DATE November 12, 1999 GROUP 1636

| | | | | U.S. PA | TENT DOCUMENTS | | | |
|--|----|-----------|--|--------------------------------|--|----------|-----------------------------|-------------------------|
| EXAMINER INITIAL | | DOCU | JMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE |
| | AA | | | | | | | |
| | AB | | | | | | | |
| | AC | | | | | | | |
| | AD | | | | | | | |
| | AE | | | | | | | |
| | AF | | | | | | | |
| | AG | | | | | | | |
| | AH | | | | | | | |
| | AI | | | | | | | |
| | AJ | | | | | | | |
| | AK | | | | | | | |
| | | | | FOREIGN P | ATENT DOCUMENTS | | | - |
| EXAMINER INITIAL | | DOCU | JMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
| | AL | | | | | | | Yes No |
| | AM | | | | | | | Yes No |
| | AN | | | | | | | Yes No |
| | AO | | | | | | | Yes No |
| | AP | | | | | | | Yes No |
| | | 01 | THER (Includin | g Author, Ti | tle, Date, Pertinent Pa | qes, etc | .) | <u> </u> |
| | AR | <u>98</u> | Patel, P.H., Evolutionary Academy of S | consequences | A., "DNA polymerase ac , " <i>Proc. Natl. Acad. S</i> | tive sit | e is highly 97:5095-5100 | mutable:), National |
| AS Perler, F.B., "InBase, the New England Biolabs Intein Database," Nucl. A Res. 27:346-347, Oxford University Press (January 1999). | | | | | | | ucl. Acids | |
| | AT | <u>98</u> | Persson, M.A Harwood Acade | .A., "Combina emic Publisha | atorial Libraries," <i>Inte</i> ers GmbH (1993). | ern. Rev | . Immunol. I | 10:153-163, |
| EXAMINER | | | | | | DATE (| CONSIDERED | |





FORM PTO-1449 FIFTH SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

next communication to Applicant.

0942.4640001/RWE/BJD/JKM APPLICANT

APPLICATION NO. 09/438,358

Gerard et al. FILING DATE

ATTY. DOCKET NO.

November 12, 1999

GROUP 1636

U.S. PATENT DOCUMENTS EXAMINER INITIAL DOCUMENT NUMBER DATE NAME CLASS SUB-CLASS FILING DATE AA AB AC AD ΑE AF AG ΑH ΑI ΑJ ΑK FOREIGN PATENT DOCUMENTS EXAMINER INITIAL DOCUMÊNT NUMBER DATE COUNTRY CLASS SUB-CLASS TRANSLATION Yes ALNo Yes ΑM No AN No Yes AO No Yes ΑP No OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Phillips-Jones, M.K., et al., "Context Effects on Misreading and Suppression at UAG Codons in Human Cells," Mol. Cell. Biol. 15:6593-6600, American Society for AR <u>99</u> Microbiology (1995). Powell, J., "Enhanced concatemer cloning-a modification to the SAGE (Serial Analysis of Gene Expression) technique, "Nucl. Acids Res. 26:3445-3446, Oxford 99 University Press (July 1998). Prieto, M.A., et al., "Molecular Characterization of the 4-Hydroxyphenylacetate Catabolic Pathway of Escherichia coli W: Engineering a Mobile Aromatic AT <u>99</u> Degradative Cluster, " J. Bacteriol. 178:111-120, American Society for Microbiology (1996). EXAMINER DATE CONSIDERED

Initial if reference considered, whether or not citation is in conformance with MPEP 609.

Draw line through citation if not in conformance and not considered. Include copy of this form with





FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

next communication to Applicant.

0942.4640001/RWE/BJD/JKM APPLICANT

APPLICATION NO. 09/438,358

Gerard et al.

FILING DATE November 12, 1999

ATTY. DOCKET NO.

GROUP 1636

| | | | | | November 12, 1999 | 1 - | 1636 | |
|----------|------------------|------|---------------------------------------|----------------------------|---|--|--|--|
| | | | | U.S. PA | TENT DOCUMENTS | | | |
| EXAMINER | | | | | | | | |
| INITIAL | | DOC | UMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE |
| | AA AB | +- | | | | 1 | | |
| | AC | +- | · · · · · · · · · · · · · · · · · · · | <u> </u> | | <u> </u> | | |
| | AD | | | | | <u> </u> | | |
| | AE | | | <u> </u> | | | | |
| | AF | | | <u> </u> | - | | | |
| - | AG | | | | | | | |
| - | АН | | · | · · | | <u> </u> | | - |
| | AI | _ | | | | | | |
| | AJ | | · | | | | | |
| | AK | | | | | <u> </u> | | |
| | 1 | | | FOREIGN P | ATENT DOCUMENTS | <u> </u> | | |
| EXAMINER | | | | T | | | | |
| INITIAL | | DOCU | JMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
| | AL | | | | | | | Yes |
| | | | | | | | | Yes |
| | AM | | | | | | | No |
| | AN | | | | | | | Yes No |
| | AO | | _ | | | | | Yes |
| | AU | | | | | | | No Yes |
| | AP | | | | | | | No |
| | AR | 100 | Qin, M., et a lox recombinate (1995). | al., "Site-spation," Nucl. | tle, Date, Pertinent Pag Decific cleavage of chron. Acids Res. 23:1923-192 | mosomes 7, Oxfo | in vitro the distribution of the contract of the Region of | ry Press |
| EXAMINER | AT | 100 | Sambrook, J., | , et al., Mol | B:261-272, The MIT Press Decular Cloning: A Labo Press, New York, NY, pp | ratory ! | Manual, 2nd | ed., Cold |
| | | | | | | J DATE (| .C. GIDERED | |





FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

| П | ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM | APPLICATION NO. 09/438,358 |
|---|---|----------------------------|
| П | APPLICANT | |
| | Gerard et al. | |
| | FILING DATE | GROUP |

1636

| U.S. PATENT DOCUMENTS | | | | | | | | | | | |
|---------------------------------------|--------------|------------|--------------------------------|---|--|---------|---|--------------------------|--|--|--|
| EXAMINER INITIAL | | DOCU | MENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE | | | |
| | AA | | - | | | | | | | | |
| | AB | | | | | | | | | | |
| | AC | | | | | | | | | | |
| | AD | | | | | | | | | | |
| | AE | | | | | | | | | | |
| | AF | | | | | | | | | | |
| | AG | | | | | | | | | | |
| | АН | | | | | | | | | | |
| | AI | | | | | | | | | | |
| | AJ | | | | | | | | | | |
| | AK | | | | | | | | | | |
| | | | | FOREIGN PA | ATENT DOCUMENTS | | | | | | |
| EXAMINER INITIAL | | DOCI | MENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | | | |
| | | 1 | | 21112 | COONINI | CDADO | SOB-CHASS | Yes | | | |
| | AL | | | | | | | No | | | |
| | AM | | | | | | | Yes No | | | |
| | AN | | | | | | | Yes No | | | |
| · · · · · · · · · · · · · · · · · · · | | <u> </u> | | | | | | Yes | | | |
| | AO | | | | | | , | No Yes | | | |
| | AP | | | | | | | No | | | |
| | | TO | HER (Including | g Author, Tit | cle, Date, Pertinent Pag | es, etc | .) | | | | |
| | AR | <u>101</u> | Sandhu, J.S., 12:437-462, C | | gineering of Antibodies, 92). | ," Crit | . Rev. Biote | echnol. | | | |
| | AS | <u>101</u> | spoIVC Encode | Sato, T., et al., "The cisA Cistron of Bacillus subtilis Sporulation Gene spoIVC Encodes a Protein Homologous to a Site-Specific Recombinase," J. Bacteriol. 172:1092-1098, American Society for Microbiology (1990). | | | | | | | |
| | AT | 101 | cells by the | Cre recombin | N., "Site-specific DNA ase of bacteriophage P1, cademy of Sciences (1988 | " Proc. | nation in m | nammalian 1. Sci. USA | | | |
| EXAMINER | | | | - - - | | DATE | ONSTREEE | | | | |

November 12, 1999



FORM PTO-1449
FIFTH SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

next communication to Applicant.

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM

APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

FILING DATE November 12, 1999 GROUP 1636

| | | | | | November 12, 1999 | | L636 | |
|---|----|-------------|---|----------------|--|----------|-----------------------------|-------------------------|
| | | | | U.S. PA | TENT DOCUMENTS | | | |
| EXAMINER INITIAL | | DOC | UMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE |
| | AA | | | | | | | |
| | AB | | | | | | | |
| | AC | | | | | | | |
| | AD | | - | | | | | |
| | AE | | | | | | | |
| | AF | | <u> </u> | | | | | |
| | AG | | | | | | | |
| | АН | | | | | | | |
| | AI | | | | | | | |
| | AJ | | | | | | | |
| | AK | | | | <u> </u> | | | |
| | | · · · · · · | | FOREIGN P | ATENT DOCUMENTS | | | |
| EXAMINER INITIAL | | DOC | JMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
| | AL | | | | | | | Ye N |
| | AM | | | | | | | Ye N |
| | AN | | | | | | | Ye N |
| | AO | | | | | | | Ye: |
| | AP | | _ | | | | | Ye: |
| | | 0 | THER (Includin | g Author, Ti | tle, Date, Pertinent Pag | ges, etc | .) | |
| | AR | 102 | Sauer, B., "F Recombination Liss, Inc. (1 | n System," J | nd Functioning in Yeast . Cell. Bio. Chem. Supp. | of a Ba | cterial Site 242 (I340), | e Specific , Alan R. |
| AS Schild, D., et al., "Cloning of three human multifunction de novo puris biosynthetic genes by functional complementation of yeast mutations," Natl. Acad. Sci. USA 87:2916-2920, National Academy of Sciences (1990) | | | | | | | | s." Proc. |
| | AT | 102 | Schnepf, E., Proteins," Mi Microbiology | icrobiol. Mol | cillus thuringiensis and L. Biol. Rev. 62:775-806 .998). | Its Pe | sticidal Cry can Society | rstal for |
| EXAMINER | | <u> </u> | 1 | | | DATE (| CONSIDERED | |
| | | | | | | | | |

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with

١

FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

next communication to Applicant.

FORM PTO-1449

0942.4640001/RWE/BJD/JKM APPLICANT

APPLICATION NO. 09/438,358

Gerard et al.

ATTY. DOCKET NO.

FILING DATE November 12, 1999 GROUP

| | | | | | November 12, 1999 | | 1636 | | |
|---------------------------------------|----|--|--|---------------|--|--|---------------------------|----------------------------|--|
| | | | | U.S. PAT | TENT DOCUMENTS | | | | |
| EXAMINER INITIAL | | DOC | UMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DAT | |
| | AA | | | | | | | | |
| · · · · · · · · · · · · · · · · · · · | AB | | | | | | | | |
| | AC | | | | | | | | |
| | AD | | | | | | | | |
| | AE | | | | | | | | |
| | AF | | | | | | | | |
| | AG | | | | | | | | |
| | AH | | | | | | | | |
| | AI | | | | | | | | |
| | AJ | | | | | | | | |
| | AK | | | | | | | | |
| | | | | FOREIGN P. | ATENT DOCUMENTS | , | | | |
| EXAMINER INITIAL | | DOCU | JMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATIO | |
| | AL | | | | | | | Y∈ N | |
| | АМ | | | | | | | Ye M | |
| | AN | <u> </u> | | | | | | Ye N | |
| | AO | | | | | | | Ye N | |
| | ,, | | | İ | | | | Ye | |
| | AP | | | <u> </u> | l | <u>. </u> | | N | |
| | AR | Scott, S.D., and Marples, B., "Comment on the use of the cre/loxP recombinase system for gene therapy vectors," Gene Therapy 7:1706, Macmillan Publishers Ltd. (2000). | | | | | | | |
| | AS | Shim, J., et al., "Distinct and Redundant Functions of μ 1 Medium Chains of t AP-1 Clathrin-Associated Protein Complex in the Nematode Caenorhabditis elegans," Mol. Biol. Cell 11:2743-2756, The American Society for Cell Biolog (2000). | | | | | | | |
| | AT | 103 | Skraly, F.A., Operon," <i>Appl</i> (January 1998 | l. Environ. M | onstruction and Characte Sicrobiol. 64:98-105, Am | rization erican S | of a 1,3-F Society for | Propanediol Microbioloc | |
| XAMINER | | I | L | | | DATE C | CONSIDERED | • | |



FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

| ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM | APPLICATION NO. 09/438,358 | | | | |
|--|----------------------------|--|--|--|--|
| APPLICANT Gerard et al. | | | | | |
| FILING DATE November 12, 1999 | GROUP | | | | |

| | <u></u> | | | | November 12, 1999 | | 1636 | | |
|---------------------------------------|---------|----------|---|---------------|--|--------------------------|-------------------------------------|------------------------|--|
| | | | | U.S. PA | TENT DOCUMENTS | | | | |
| EXAMINER INITIAL | | DOC | UMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE | |
| | AA | | | | | | | | |
| | AB | | | | | | | | |
| · · · · · · · · · · · · · · · · · · · | AC | | | | | | | | |
| | AD | | | | | | | | |
| | AE | | | | | | | | |
| | AF | | | | | | | | |
| · · · · · · · · · · · · · · · · · · · | AG | | | | | | | | |
| | AH | | | <u></u> | | | | | |
| | AI | | | | | | | | |
| | AJ | | | | | | | | |
| | AK | | | | | | | | |
| | | | | FOREIGN P | ATENT DOCUMENTS | | | • | |
| EXAMINER | | | | | | | | | |
| INITIAL | | DOC | UMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | |
| | AL | | | | | | | Yes No | |
| | АМ | | - | | | | | Yes No | |
| | AN | | | | | | | Yes | |
| | AN | | | | | | | No | |
| | AO | | | | | | | Yes No | |
| | AP | | | | | | | Yes No | |
| | - | 0 | THER (Includin | g Author, Ti | tle, Date, Pertinent | Pages, etc | | | |
| | AR | 104 | THER (Including Author, Title, Date, Pertinent Pages, etc.) Spinella, D.G., et al., "Tandem arrayed ligation of expressed sequence tags (TALEST): a new method for generating global gene expression profiles," Nucl. Acids Res. 27(e22):i-viii, Oxford University Press (September 1999). | | | | | | |
| | AS | 104 | Stark, W.M., et al., "Site-Specific Recombination by Tn3 Resolvase: Topological Changes in the Forward and Reverse Reactions," Cell 58:779-790, Cell Press (1989). | | | | | | |
| | АТ | 104 | directed meta | abolic engine | hyl-substituted eryt ering," <i>Proc. Natl.</i> ces (June 1998). | hromycin d Acad. Sci. | erivatives p <i>USA 95:</i> 7305 | produced by 5-7309, | |
| EXAMINER | | <u> </u> | <u> </u> | | | DATE (| CONSIDERED | | |

Page 39 of 44

RADEMAS

FORM PTO-1449 FIFTH SUPPLEMENTAL

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

FILING DATE November 12, 1999

GROUP 1636

| | | | | | November 12, 1999 | | 1636 | |
|---------------------|---|----------|--------------------------------|--------------|--|--------------------|-----------------------------|-------------------|
| | | | | U.S. PA | TENT DOCUMENTS | | | |
| EXAMINER INITIAL | | DOC | UMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE |
| | AA | | | | | | | |
| | АВ | | | | | | | |
| | AC | | | | | | | |
| | AD | | | | | | | |
| | AE | | | | | | | |
| | AF | | | | | | | |
| | AG | | | | | | | |
| | АН | ↓ | | <u> </u> | | | | |
| | AI | | | | | | | |
| | AJ | | | | | | | |
| | AK | <u> </u> | | | | | | |
| | | | | FOREIGN P | ATENT DOCUMENTS | | | |
| EXAMINER INITIAL | | DOCT | JMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
| | AL | | | | | | | Yes No |
| | АМ | | | | | | | Yes No |
| | AN | | | | | | | Yes No |
| | AO | | | | | | | Yes No |
| | AP | | | | - | | | Yes |
| | | | WIRD (Y3-3) | | | | | No |
| | OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Stellwagen, A.E., and Craig, N.L., "Mobile DNA elements: controlling transposition with ATP-dependent molecular switches," Trends Biochem. Sci. 23:486-490, Elsevier Science (December 1998). Stenzel, T.T., et al., "The Integration Host Factor of Escherichia coli Binds to Bent DNA at the Origin of Replication of the Plasmid pSC101," Cell 49:709-717, Cell Press (1987). | | | | | | | |
| | | | | | | | | |
| | АТ | 105 | Stryer, L., " Biochemistry, | The DNA Temp | late Contains Stop Sign H. Freeman and Co., New | als for York, N | transcripti IY, p. 610 (| on," in 1981). |
| EXAMINER | 1 | | | | | DATE C | ONSIDERED | |



FORM PTO-1449

FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM

APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

FILING DATE November 12, 1999 GROUP 1636

| | | | | πς | PATENT DOCUMENTS | | | |
|---|----------|----------------|---|---|---|----------------------------------|-------------------------------|-----------------------------|
| EXAMINER | T | | | 1 0.5. | PATENT DOCUMENTS | | | |
| INITIAL | | DOCT | JMENT NUMBER | DATE | NAME | CLA | SS SUB-CLASS | FILING DAT |
| | AA | - | <u> </u> | | | | | _ |
| - | AB | | | | | | | |
| | AC | | | | | | | |
| | AD | | | | | | | |
| | AE | | | | | | | |
| | AF | | | | · · · · · · · · · · · · · · · · · · · | | | |
| | AG AH | | | | | | | |
| | AI | | | | | | | - |
| | AJ | <u> </u> | | | | | | <u> </u> |
| | AK | | | | | | | |
| | AK | | | | | | | |
| EXAMINER | 1 | <u> </u> | | FOREIGE | N PATENT DOCUMENTS | | <u> </u> | |
| NITIAL | | DOC | MENT NUMBER | DATE | COUNTRY | CLA | SS SUB-CLASS | TRANSLATI |
| | | | | | | | | Y |
| | AL | | | ļ | | | | |
| | АМ | | | | | B | | Y |
| | AN | | | | | | | Y |
| | AO | | | | | | | Y |
| | 1 | - | | · · · · · · · · · · · · · · · · · · · | | | | 7 |
| | AP | | | | | | | Y |
| | | 07 | THER (Includin | g Author, | Title, Date, Pert: | inent Pages, | etc.) | |
| | AR | 106 | Requirement | of a Regio | Minimal Essential n Downstream of It icrobiology (1993) | erons," J. Ba | ssmid pSC101 lacteriol. 175 | Replication: :5993-6001, |
| Uetsuki, T., et al., "Isolation and Characterization of the Human Chr Gene for Polypeptide Chain Elongation Factor-1α," J. Biol. Chem. 264: The American Society for Biochemistry and Molecular Biology (1989). | | | | | | | | 264:5791-579 |
| | AT | 106 | van den Berg analysis of University P | unknown SA | l., "Serial analys GE tags," <i>Nucl. Ac</i> ember 1999). | sis of gene ex sids Res. 27(e | pression: rap 17):i-iii, O | oid RT-PCR (ford |
| XAMINER | | <u> </u> | | ············ | | DAT | E CONSIDERED | |
| EXAMINER: | hrough | citat | ion if not in | dered, whe | ether or not citat ce and not conside | ion is in con | formance with | MPEP 609 |

Page 41 of 44

JAN 2 2 2004 3

FORM PTO-1449

FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

| ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM | APPLICATION NO. 09/438,358 |
|--|----------------------------|
| APPLICANT Gerard et al. | |
| FILING DATE November 12, 1999 | GROUP |

| | NOVEMBER 12, 1999 1636 | | | | | | | | | | |
|---------------------|--------------------------|--|--|--|---|--|------------------------------|-----------------------------|--|--|--|
| | | | | U.S. PAT | FENT DOCUMENTS | | | | | | |
| EXAMINER | | | | | | | | | | | |
| INITIAL | AA | DOCO | UMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE | | | |
| | AB | | | | <u> </u> | | | | | | |
| | AC | <u> </u> | | | | | | | | | |
| | AD | <u> </u> | | | | | | - | | | |
| | AE | | | · | | | | | | | |
| | AF | | | | | | | | | | |
| | AG | | | | | | | | | | |
| | AH | <u> </u> | | | | | | | | | |
| | AI | | | <u> </u> | | <u> </u> | | | | | |
| | AJ | ↓ | | <u> </u> | ! | <u> </u> | <u> </u> | | | | |
| | AK | <u></u> | | <u></u> ' | | ' | | | | | |
| | | т— | | FOREIGN PA | ATENT DOCUMENTS | т — | | T | | | |
| EXAMINER INITIAL | <u> </u> | DOCU | JMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | | | |
| | AL | | | [' | | \[\text{'} | | Yes No | | | |
| | AM | | | | | | | Yes | | | |
| | | | | | | | | No Yes | | | |
| | AN | | | | | | | No Yes | | | |
| | AO | | | | | | | No | | | |
| | AP | | | <u> </u> ' | | Í' | | Yes No | | | |
| | | TO | THER (Including | g Author, Tit | tle, Date, Pertinent Pag | es, etc | .) | | | | |
| | AR | 107 | Vetter, D. et Proc. Natl. A | : al., "Site- Acad. Sci. US | -specific recombination of SA 80: 7284-7288, Nationa | of yeast al Acado | z 2-μm DNA i emy of Scier | in vitro," nces (1983). | | | |
| | AS | <u>107</u> | Voss, S.D., et al., "The role of enhancers in the regulation of cell-type-specific transcriptional control," <i>Trends Biochem. Sci. 11</i> :287-289, Elsevier Science (1986). | | | | | | | | |
| | АТ | 107 | Voziyanov, Y. integrase fam Press (Februa | mily recombina | A general model for site- nases," <i>Nucl. Acids Res</i> . | -specifi 27:930· | ic recombina -941, Oxford | tion by the l University | | | |
| EXAMINER | | | | | | DATE C | CONSIDERED | | | | |





FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM

APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

FILING DATE November 12, 1999 GROUP 1636

| | | | | | November 12, 1999 | | 1636 | | |
|--|-------------|--------------|-------------------------------|--------------------------------|--|--|--------------|-----------------------------------|--|
| | | | | U.S. PAT | TENT DOCUMENTS | | | | |
| EXAMINER | | 1 | | | | | | | |
| INITIAL | | DOCU | JMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DAT | |
| | AA | | | | | - | | | |
| | AB | + | | | | - | | | |
| | AC | + | | ļ | | | | | |
| | AD | | | | <u> </u> | | ļ <u>.</u> | | |
| | AE | + | | | | | | | |
| | AF | - | | | | | | | |
| | AG AH | + | | | | - | | | |
| | AI | - | | | | | | | |
| | AJ | | | | | | - | | |
| | AK | + | | - | | - | | | |
| | AK | <u> </u> | | 7077777 | | | <u> </u> | <u> </u> | |
| EXAMINER | 1 | T - | | FOREIGN P | ATENT DOCUMENTS | <u> </u> | - | T | |
| INITIAL | | DOCU | MENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATIO | |
| | | | | | | | | Υe | |
| | AL | + | | | | | | 1 | |
| | AM | | | | | | | Ye | |
| • | 1 | 1 | <u>-</u> | | | + | | N Va | |
| | AN | | | | | | | Y ∈ | |
| | | | | | | | | Ye | |
| | AO | | | | <u> </u> | | | N | |
| | AP | | | | | | | Ye N | |
| | | 01 | THER (Includin | a Author Ti | tle, Date, Pertinent Pa | | L | <u> </u> | |
| | AR | 108 | essential for | r translation | a suppressor of a HIS4 n initiation and affect pring Harbor Laboratory | s UV res | istance in y | tation, is reast," <i>Gene</i> | |
| AS 108 Pending Non-Provisional United States Hartley et al., filed August 28, 2000 | | | | | | Patent Application No. 09/648,790, (NOT PUBLISHED). | | | |
| | AT | 108 | Pending Non-I Hartley et a | Provisional U l., filed Oct | United States Patent App Cober 8, 2003 (NOT PUBL | olication | n No. 10/680 | 0,316, | |
| EXAMINER | 1 | <u> </u> | | | | DATE (| CONSIDERED | | |



FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

next communication to Applicant.

0942.4640001/RWE/BJD/JKM

APPLICATION NO. 09/438,358

APPLICANT

Gerard et al.

FILING DATE November 12, 1999

ATTY. DOCKET NO.

GROUP 1636

| | | | | | NOVEMBEL 12, 1999 | L | | |
|---------------------|----|---|------------------------------|---------------|------------------------|-------------|--------------|-------------|
| | | | | U.S. PA | TENT DOCUMENTS | | , | |
| EXAMINER INITIAL | | DOC | JMENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE |
| | AA | | | | | | | |
| | AB | | | | | | | |
| | AC | | | | | | | |
| | AD | | | | | | | |
| | AE | | | | | | | |
| | AF | | | | | | | |
| | AG | ļ | | | | | | |
| | AH | ļ | | | | | | |
| | AI | 4 | | | | | | |
| | AJ | <u> </u> | | | | | | |
| | AK | | | | | | | |
| | | | | FOREIGN P | ATENT DOCUMENTS | | | |
| EXAMINER INITIAL | | DOCU | JMENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION |
| | AL | | | | | | | Ye N |
| | АМ | | | | | | | Ye N |
| | AN | | | | | | | Ye N |
| | AO | | | | | | | Ye N |
| | AP | | | | | | | Ye N |
| | | 01 | THER (Includin | g Author, Ti | tle, Date, Pertinent | Pages, etc | .) | |
| | AR | Pending Non-Provisional United States Patent Application No. 10/396,696, Hartley et al., filed March 26, 2003 (NOT PUBLISHED). | | | | | | |
| | AS | Pending Non-Provisional United States Patent Application No. 09/695,065, Brasch et al., filed October 25, 2000 (NOT PUBLISHED). | | | | | | |
| | AT | 109 | Pending Non- Brasch et al | Provisional (| United States Patent A | .pplication | n No. 09/984 | 1,239, |
| EXAMINER | | 1 | L | | | DATE (| CONSIDERED | |

Page 44 of 44

JAN 2 2 2004 E

FORM PTO-1449

FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

| ATTY. DOCKET NO. 0942.4640001/RWE/BJD/JKM | APPLICATION NO. 09/438,358 |
|--|----------------------------|
| APPLICANT Gerard et al. | |
| FILING DATE | GROUP |

| NOVEMBER 12, 1999 1636 | | | | | | | | | | |
|--|----|--|--|------------|-----------------|----------|-----------|-------------|--|--|
| | | | | U.S. PAT | ENT DOCUMENTS | | | | | |
| EXAMINER | 1 | | | | | | | | | |
| INITIAL | | DOCU | MENT NUMBER | DATE | NAME | CLASS | SUB-CLASS | FILING DATE | | |
| | AA | <u> </u> | | | | <u> </u> | | | | |
| | AB | | | | | | | | | |
| | AC | ļ | | | | | | | | |
| | AD | <u> </u> | | | | | | | | |
| | AE | <u> </u> | | | | | | | | |
| | AF | <u> </u> | | | | | | | | |
| | AG | . | | | | | | | | |
| | AH | ļ | | | | | | | | |
| - | AI | - | | | | ļ | | | | |
| | AJ | | ···· | | | <u> </u> | | | | |
| | AK | <u> </u> | | | | <u> </u> | | | | |
| | T | 1 | <u> </u> | FOREIGN PA | ATENT DOCUMENTS | | | r | | |
| EXAMINER INITIAL | | DOCI | MENT NUMBER | DATE | COUNTRY | CLASS | SUB-CLASS | TRANSLATION | | |
| | † | 1 | | 22 | COONTRI | CIASS | BOB-CHASS | | | |
| | AL | | | | | | | Yes No | | |
| | | | | | | | | Yes | | |
| | AM | | | | | | | No | | |
| | AN | | | | | | • | Yes | | |
| | 1 | | | | | | | No Yes | | |
| | AO | | | | | | | No | | |
| | 1 | | | | | | | Yes | | |
| | AP | | | | | | | No | | |
| OTHER (Including Author, Title, Date, Pertinent Pages, etc.) | | | | | | | | | | |
| | AR | Pending Non-Provisional United States Patent Application No. 10/640,422, Cheo et al., filed August 14, 2003 (NOT PUBLISHED). | | | | | | | | |
| | AS | 110 | Pending Non-Provisional United States Patent Application No. 10/454,793, Chesnut et al., filed June 5, 2003 (NOT PUBLISHED). | | | | | | | |
| | AT | | | | | | | | | |
| EXAMINER | | | | | | DATE | ONGIDERED | | | |